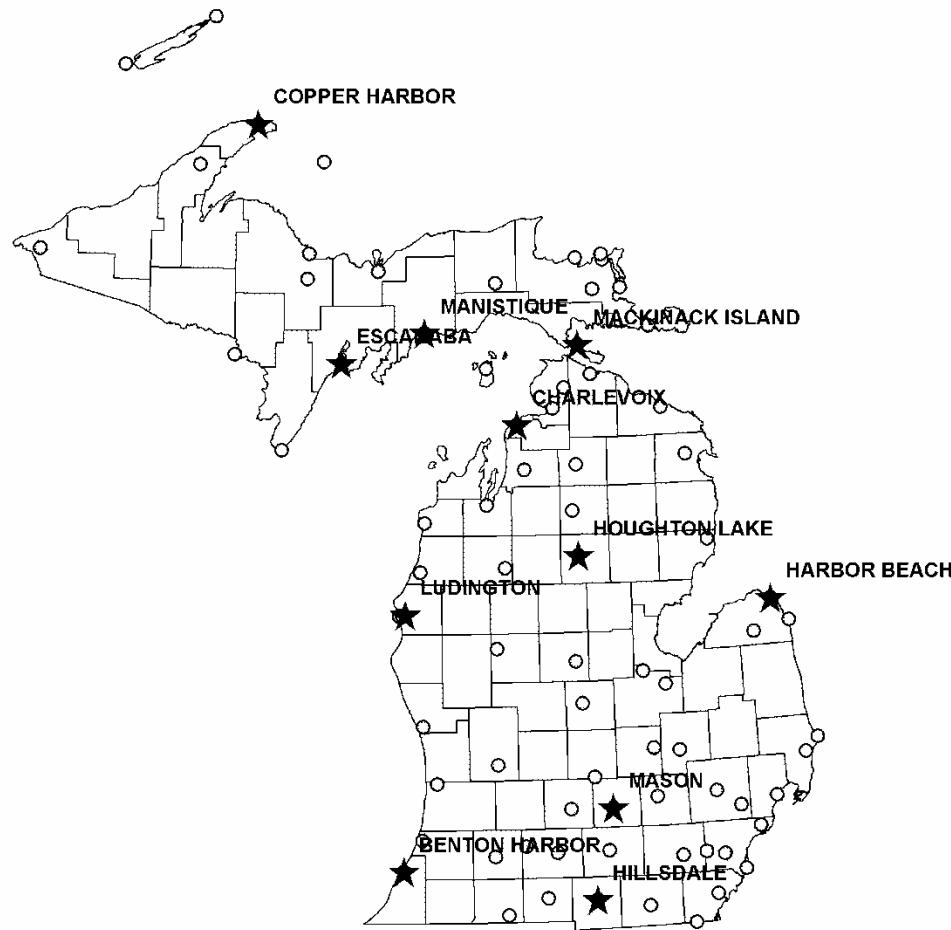


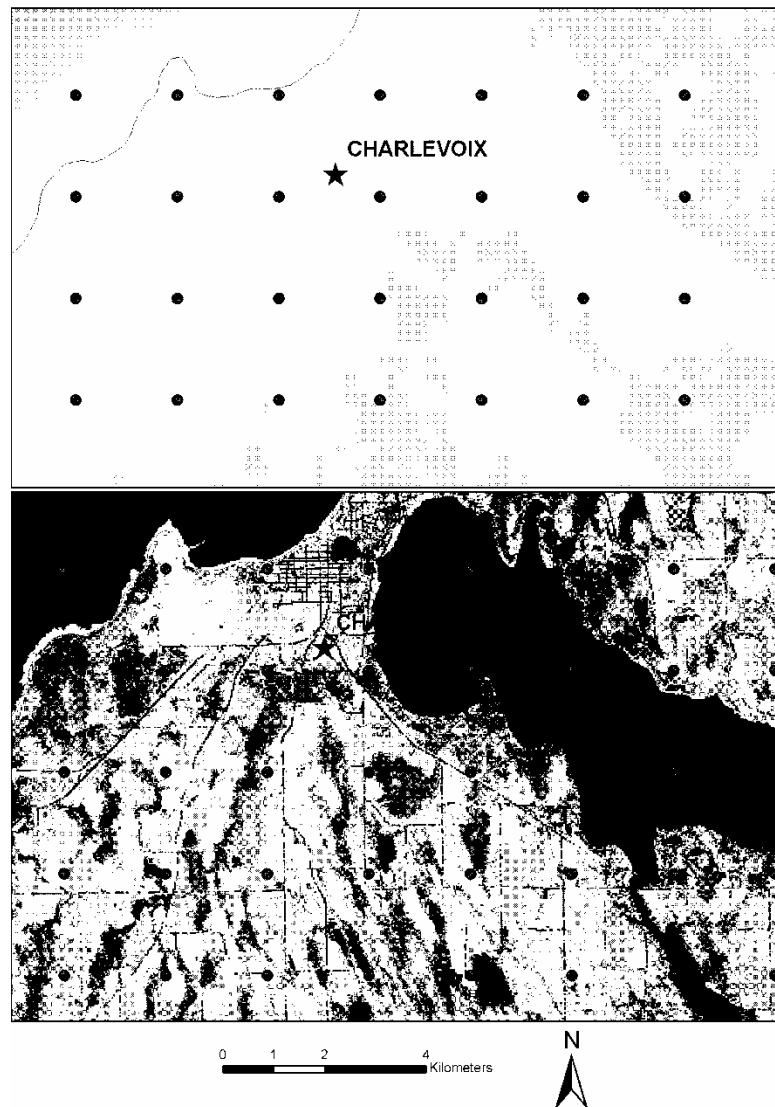
Introduction from Tom Stanton

- Presentation by Sina Sadeghi-Baghsorkhi, Master's Degree Candidate at Center for Sustainable Systems, School of Natural Resources and Environment The University of Michigan. [Mailto:sinasb@umich.edu](mailto:sinasb@umich.edu)
- Please keep in mind the information in this presentation is preliminary, and not for quotation or publication.

11 Metstations Selected
through Spatial Analysis (GIS) and Data Availability

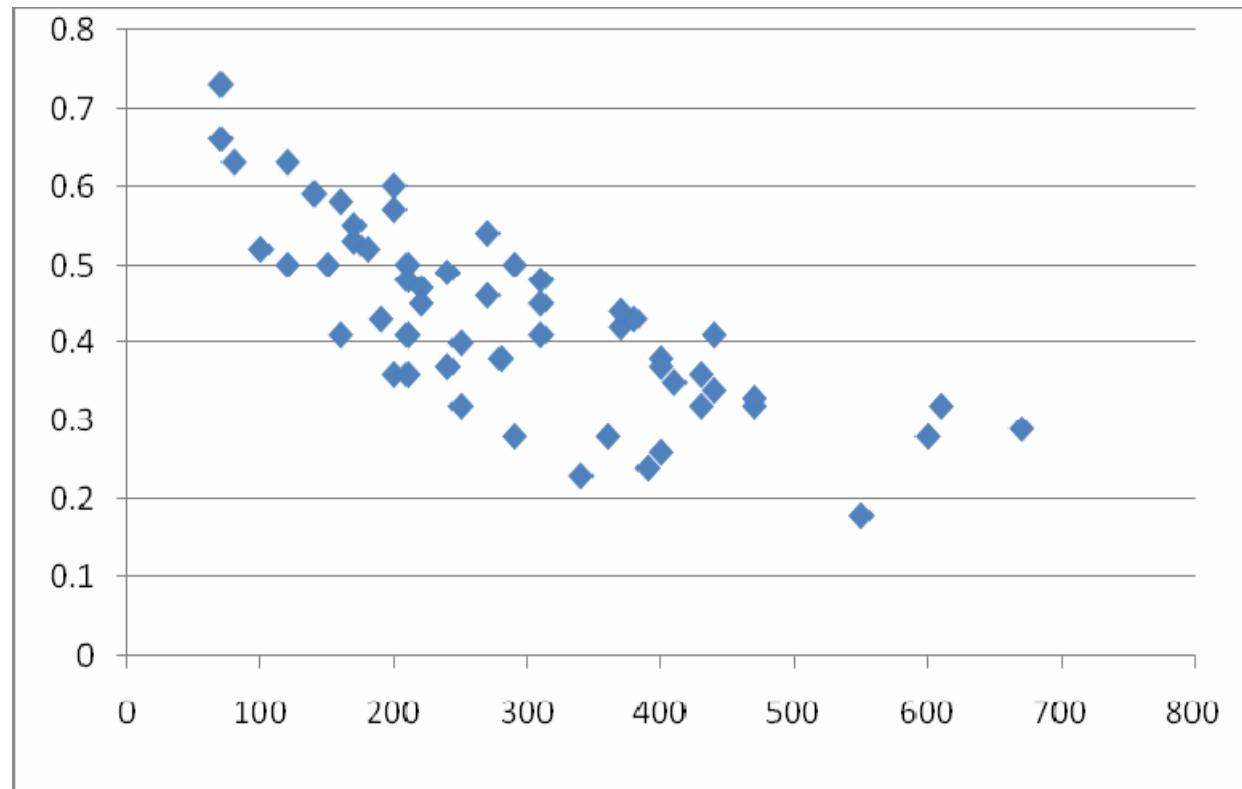


50m Wind Speed Time Series Reconstruction

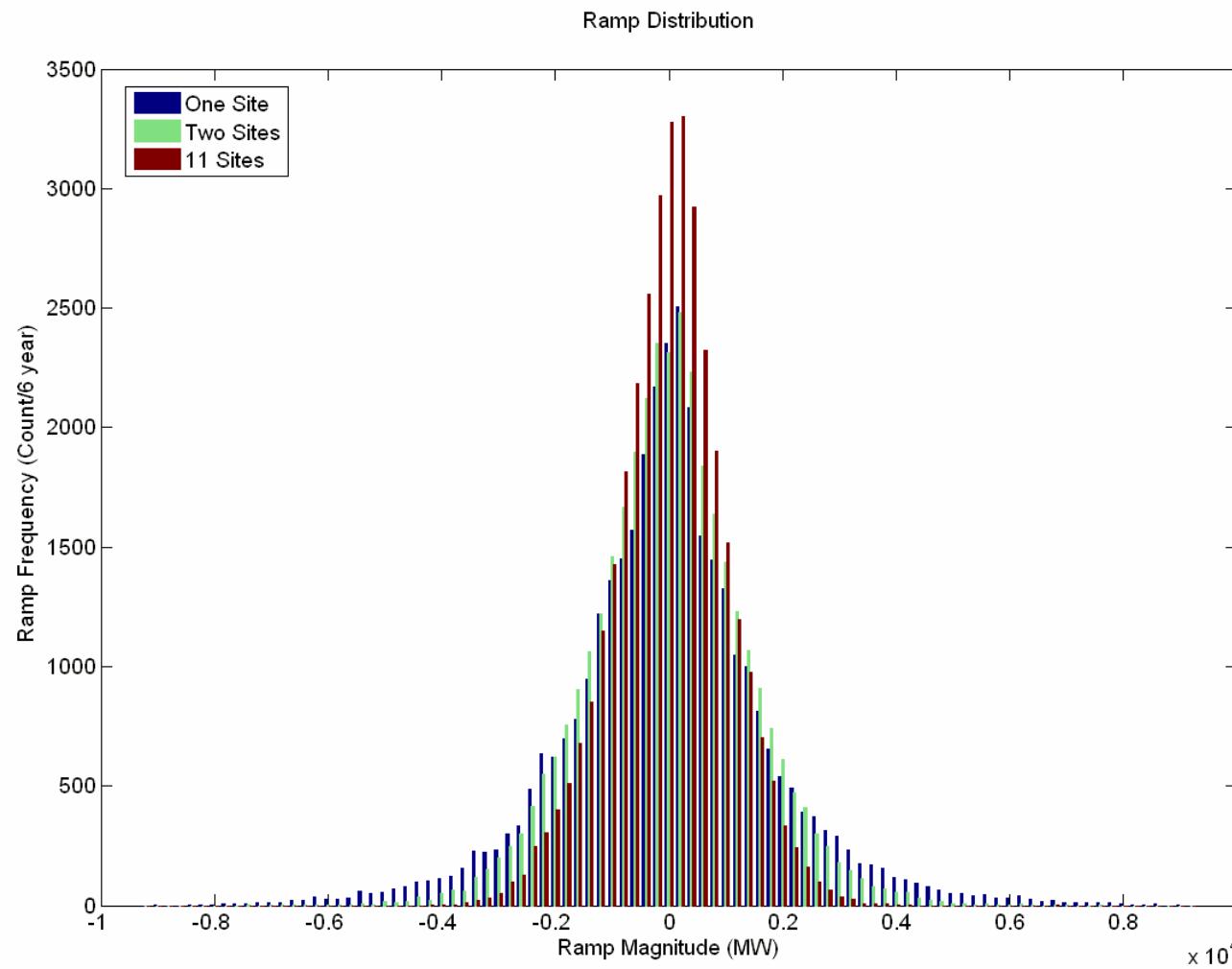


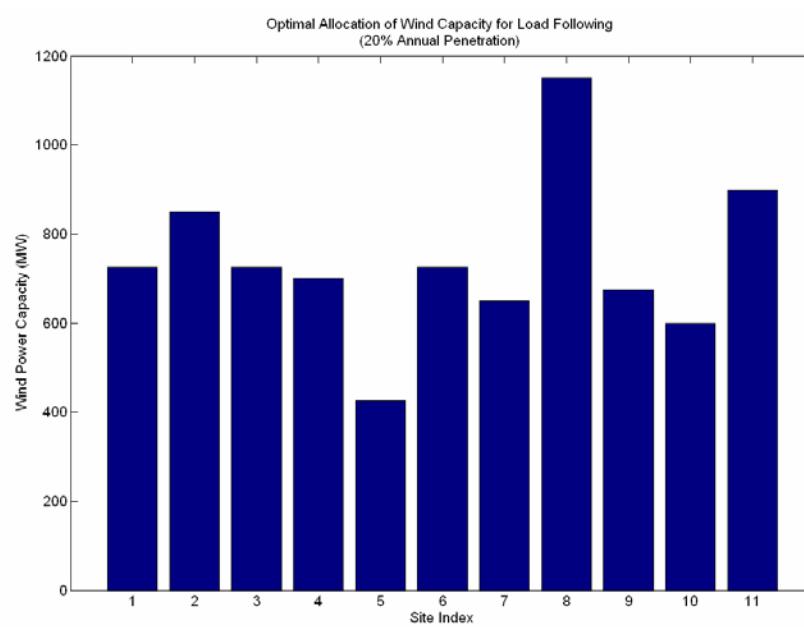
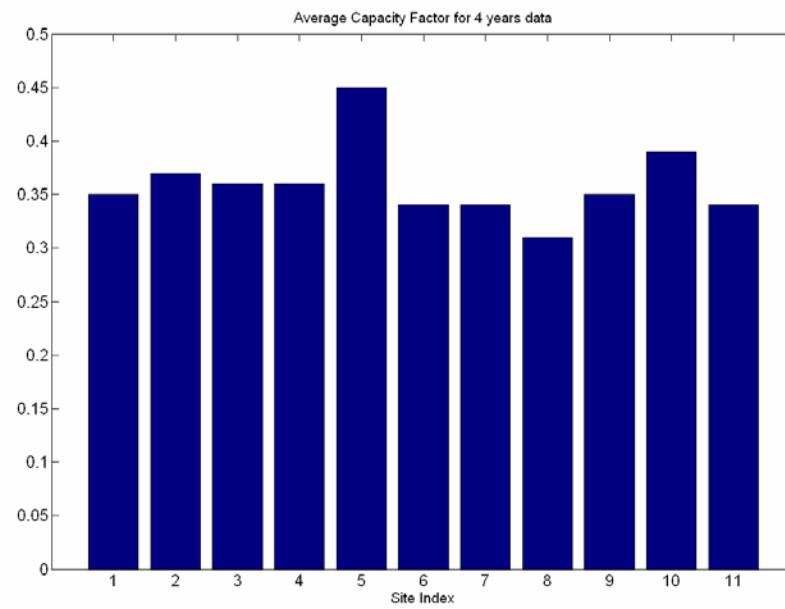
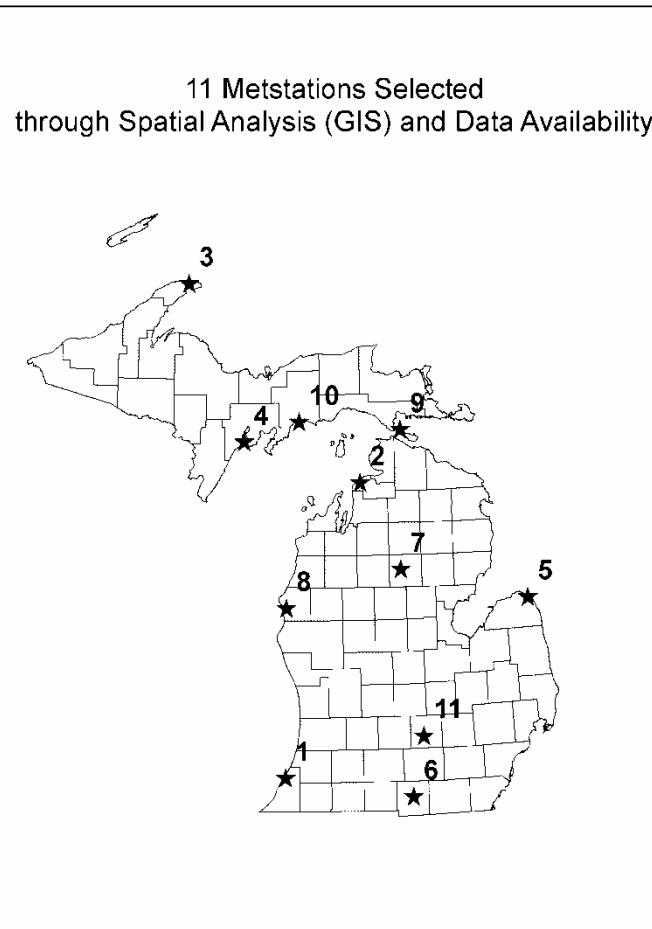
Wind Power Correlation in Michigan

Geographic Region under Study $600 \times 400 \text{ km}^2$

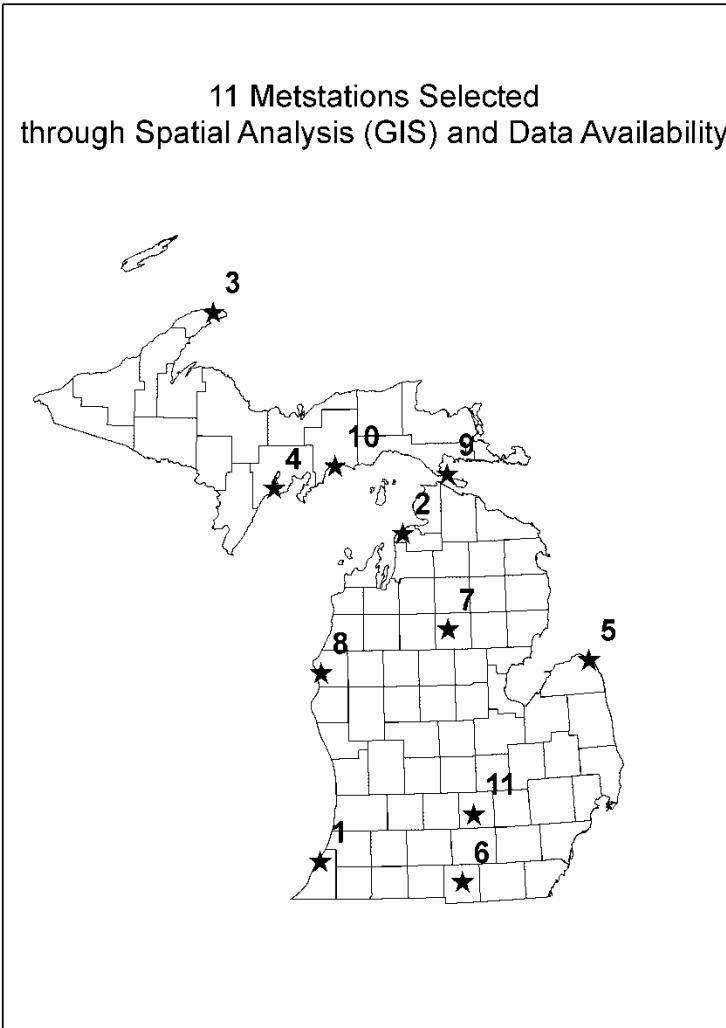


Optimizing For Load Following Requirement





Reliability Studies



Station	4 years Average Capacity Factor	Wind Power Correlation with Load
Benton Harbor	0.35	-0.0355
Charlevoix	0.37	-0.1025
Copper Harbor	0.36	-0.0383
Escanaba	0.36	-0.023
Harbor Beach	0.45	-0.0941
Hillsdale	0.34	-0.1729
Houghton	0.34	-0.085
Ludington	0.31	-0.0728
Mackinack	0.35	-0.1363
Manistique	0.39	-0.0909
Mason	0.34	-0.0696

Wind Power-Load Correlation for 11 Sites

